



The spillover of anti-immigration politics to the schoolyard

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ABSTRACT

There has been a resurgence in populist politics, often accompanied by anti-immigrant rhetoric. This may potentially spill over into societal hostility towards immigrants. We use census data on 5th-grade Italian students to estimate the causal effect of anti-immigration politics on school bullying. Using variations in the timing of municipal elections, we demonstrate that where elections occur and the anti-immigration party Lega Nord is highly active, the victimisation of immigrant children increases, while we find no effect where Lega Nord has little support and for native children, suggesting important negative spillovers from politics to the wellbeing of children.

1. Introduction

There has been a resurgence in right-wing and populist politics across the world. In continental Europe, this includes the rise or resurgence of a range of political parties with disparate and multi-faceted political platforms, but where a common feature is a focus on immigration. While the recent refugee ‘crisis’ clearly brought this into sharper focus, much of the political traction that these parties have gained also relates to ongoing economic migration and the perception that this generates negative outcomes for the recipient population. This is reflected in the development of a now sizeable literature that seeks to estimate the effect of immigration flows on voting patterns and the political views of the native population (see, for instance, [Otto and Steinhardt, 2014](#); [Barone et al., 2016](#); [Sekeris and Vasilakis, 2016](#); [Dustmann et al., 2019](#); [Hangartner et al., 2019](#)) and on the effect of political preferences on immigration and immigration policy ([Bracco et al., 2018](#); [Gamalerio, 2018](#)). There are also a number of papers providing evidence that native-born populations tend to blame immigrants or other minority groups for economic and social problems (see for instance [Isaksen, 2019](#); [Haaland and Roth, 2020](#); [Campante et al. 2020](#)).¹

While it is worth emphasizing that these parties differ markedly in overall platforms, they have converged towards an anti-immigration and anti-immigrant position. This is the case for the *AfD* in Germany, the Danish People’s Party in Denmark, Progress Party in Norway, and Lega Nord in Italy (for an analysis on the evolution of Lega Nord policy platforms, see [Albertazzi et al., 2018](#)). This type of rhetoric was also a feature of the Brexit referendum of 2015 in the UK and the Trump presidential campaign. In the UK case, a substantial spike in reported hate crime occurred after the referendum ([Meleady et al., 2017](#)) and recent research demonstrates the role of social media as a conduit between political rhetoric and hate crime in both the US and Germany ([Müller and Schwarz, 2018](#) and [Müller and Schwarz, 2021](#)). Recently [Romarri \(2020\)](#) shows that hate crime occurrence is significantly higher in Italian municipalities where an extreme-right mayor is in power. To-

¹ This fits with the ‘group-threat’ hypothesis ([Quillian, 1995](#)) that argues that prejudice against immigrants tends to increase in bad economic times because they perceive immigrants as a threat to the well-being of the members in their group.

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gether this evidence leads to a broader concern that the language and actions of anti-immigration politicians lead to both an increase in hostility towards immigrants and non-natives, but also a more general breakdown in civic behaviour and the targeting of minority groups. An aspect of this is recent evidence of an increase in racially motivated bullying of children in the UK and US (Schilter, 2018; Huang and Cornell, 2019). There is also experimental evidence that members of minorities are much more likely to be targeted and punished for wrongdoings not perpetrated by them or by their group members (Bauer et al., 2020).

This paper provides evidence on whether the political climate affects school bullying, focusing on immigrants. A number of potential confounding factors make identification difficult. For example, a more (or less) welcoming political climate towards immigrants may be related to other factors that may also affect the degree of violence observed in schools. Intolerance towards immigrants could be greater in places with more socioeconomically disadvantaged inhabitants and this disadvantage may also be linked to bullying causing bias in OLS regressions. At the same time, there may be an underlying relationship between the share of immigrants in a given geographical area and the climate toward immigrants. As above, this has been the focus of much attention in the economic literature which broadly demonstrates higher vote shares for conservative parties in areas with greater immigrant inflows (Barone et al., 2016). Again, this makes simple regressions of political climate and bullying likely biased, and it is unclear *a priori* in what direction this bias goes.

We use the occurrence of political elections as a source of exogenous variation in the political climate and compare how elections affect the bullying behaviours towards immigrants (relative to natives) in municipalities in which an anti-immigration party (Lega Nord) is an active political actor to how they affect the bullying behaviours in municipalities where this type of party is not active.

Our main result is that active campaigning by Lega Nord leads to marked increases in school bullying. These effects are large and concentrated entirely among immigrant children. Lega Nord campaigning leads to an approximate 10% increase in the likelihood of immigrant children being bullied in school during the electoral campaign period. Additionally, we show that being a victim of bullying is associated with markedly lower test score performance. Our results are robust to alternative measures of bullying behaviour and to alternative methods of identifying Lega Nord presence in the municipality. Together, these results suggest that anti-immigration politics has real effects on the wellbeing of individuals, including those potentially most vulnerable.

It is important to focus on school bullying for a range of related reasons. The small existing economic and psychological literature on the impact of bullying on child outcomes demonstrates large and long-lasting effects. For instance, Brown and Taylor (2008) use British Cohort Data and show that experiencing bullying at the ages of 7 or 11 has sizeable and long-lasting effects on later educational attainment and lifetime earnings. Eriksen et al. (2014) use Danish register data and demonstrate large effects of bullying on educational attainment, and that these effects increase with the severity of bullying. Similarly, Gorman et al., 2021, using data from three cohorts of adolescents attending high school in UK, demonstrate that bullying victimisation has negative consequences on academic outcomes, mental health, unemployment and income.

School bullying is also highly prevalent. In a study by the World Health Organization 38% of children (11-years-olds) reported having been bullied at least once in the last two months (Craig et al., 2009). In the US between 2005 and 2013 about one third of the students aged between 12 and 18 suffered from some form of bullying at school (School Crime Supplement of the National Crime Victimization Survey). Ammermueller (2012) use data from TIMSS 2003 and show that between 24% and 47% of all students in grade four had been hit or hurt by other students during the last month. In Italy, about 50% of adolescents aged between 11 and 17 reported having been victim of some form

of violent or non-violent bullying behaviour in 2014; 20% reported being victim at least once a month, and 10% every week (ISTAT, 2019). Finally, bullying cuts against a key aim of public-school provision: the development of civic attitudes and social integration (Dee, 2004). This latter issue can be viewed as particularly critical in the case of immigrant or ethnic minority children.

Despite the prevalence of bullying and its high associated costs, little is known in practice about its determinants. The existing research demonstrates a range of robust associations with respect to immigrants and ethnic minorities. For example, holding socio-economic background constant, immigrant students (or those with parents born abroad) are more likely to be victims of bullying than native students. More generally, exposure to various forms of school bullying victimisation is higher for racial and ethnic minority youths. For instance, Black/African-American and Latino-American youth are more likely to be victimized at school than White American youth (Graham et al., 2009; Hanish and Guerra, 2000a; Hanish and Guerra, 2000b; Peguero, 2012; DeVoe et al., 2005). There are a number of potential reasons why immigrant students are more exposed to school bullying. These students are more likely to attend schools in poorer neighbourhoods with higher underlying levels of disorder and violence (Gottfredson 2001; Kozol 1991, 2005; Welsh et al., 1999). More generally, being an immigrant may also correlate to other unobservable characteristics that may increase the chance of being bullied. Beyond these associations, there is a lack of evidence on the determinants of bullying and victimisation, and a lack of credible causal evidence on the role of wider societal factors. This paper aims to fill this gap.

Our approach is to focus on changes in local political climate that occur due to campaigning periods of local elections and the presence of the anti-immigration party *Lega Nord* in Italy. We exploit two factors. The first relates to the timing of elections. In each municipality, a mayor is elected together with the city council for a 5-year term (4 years until 2000). All municipalities initially held elections in two separate rounds in the Spring and Autumn of 1946, but the electoral schedule of a given municipality has changed if at any time an early election was called for whichever reason. In these cases, elections are held before the natural schedule (i.e. out of this original 4 or 5 year cycle) and, as a consequence, all subsequent elections in that municipality will be held at different times with respect to other municipalities that remain on the standard cycle.² In practice, this leads to a staggered electoral schedule, with a considerable number of municipalities having elections in each year, and where critically this staggering reflects historical events unrelated to the current political climate in the municipality.

The second factor is the timing of our data. As discussed further below, we observe school bullying behaviour that occurs during the main campaigning period of these elections (but before the elections themselves). Hence, we can focus specifically on campaign periods without any additional effects from the election results themselves. In this way, we aim to provide the first causal estimates of the effect of anti-immigration campaigning on violence and bullying aimed at children. The political salience of immigration has been confirmed by Bellucci et al. (2020). Analysing the incidence of immigration-related tweets at the local level in Italy between 2010 and 2018, they observe that the likelihood for a Twitter user to mention immigration-related words is higher when elections are happening locally, while the correlation with actual landings of migrants on Italian shores is substantially weaker. We acknowledge that Twitter users are a non-random subsample of the population, but still believe that this is suggestive evidence that electoral campaigns stir the public debate and make some issues (such as immigration) more salient above and beyond their actual rel-

² For example, the city of Rome held municipal elections in 2001, 2006, 2008, 2013, 2016. Elections in 2008 and 2016 were triggered by early resignations of the incumbent mayors. At the same time the city of Turin elected its mayors in 2001, 2006, 2011 and 2016 as no resignation happened.

evance at the local level. Anecdotally, it is not difficult to find inflammatory declarations of Lega Nord politicians, in which immigrants are labelled as a threat to security and wellbeing.³

As electoral campaigning with an anti-immigrant focus is specific to those political parties, such as Lega Nord, that have taken anti-immigration and anti-immigrant positions, we distinguish between municipalities in which Lega Nord has substantial support (and runs for elections) and municipalities where this is not the case. As these two groups of municipalities also differ in terms of a number of economic and social characteristics that might also affect our outcome of interest, we estimate our model including municipal fixed effects and then consider the change in school bullying experienced by children within the same municipality which has been induced by the quasi-random occurrence of elections.

The paper is organized as follows. In Section 2 we describe our data; in Section 3 we motivate our research; Section 4 presents the methodology and in Section 5 we report and discuss the results of our estimates, carry out a number of robustness checks and run a heterogeneity analysis. Section 6 concludes.

2. Data

Our main data source is drawn from the National Program for the Assessment of Education run by INVALSI,⁴ an Italian government agency, which carries out yearly testing of student attainment in literacy and numeracy. The evaluation covers the entire population of students attending 2nd and 5th grade (primary school), as well as 8th and 10th graders (lower and upper secondary schools, respectively). For each grade, approximately 400,000 students sit the assessment every year, over two different days (for the two subjects), during the first week starting in May. In primary school, these are low-stake tests, with no clear link to either student or school outcomes.⁵

Data provided by INVALSI contains information on test scores that are collected through standardized assessments, and individual/family background characteristics which come from school administrative records. In addition, it includes a range of individual-level information on family, school and context characteristics collected through a Student Questionnaire, administered on the same day as one of the two tests.

In this paper we focus on primary school children. We further restrict our analysis to students in the 5th grade as the questionnaire providing information on family background and school environment (including the bullying questions) was not given to 2nd and 8th graders.⁶ Data are

³ Note for example Umberto Bossi (the *Lega Nord* founder) stating “We must send them all home” (12th, April 2011) referring to migrants rescued in the island of Lampedusa, or Mario Borghezio (another Lega Nord cadre) stating “... Africans are Africans ... they have not produced great geniuses...” (Radio program, la Zanzara, 29 Aprile, 2013) following after the appointment as Minister for the Integration of Cecilia Kyenge (of Congolese origin).

⁴ INVALSI is the Italian acronym for Istituto Nazionale per la Valutazione del Sistema dell’Istruzione.

⁵ For instance, school-level results are communicated by INVALSI to each school, but they can decide whether to make these scores public or not.

⁶ The bullying questions were asked for 10th grade students. However, native and immigrant students attending the 10th grade differ along some important dimensions that would make it difficult the interpretation of results. These differences are related to two institutional features. The first is that streaming into academic and non-academic tracks occurs from year 9, and immigrant children disproportionately are sorted into the non-academic track (they represent 19% of pupils in Vocational Schools and only 6% of pupils in Lyceums). The second and more critical point is that a large proportion of immigrant children drop-out of school before this grade. While 11.3% of Italian drop out of school after 8th grade, among those with immigrant background this rises to 36.5% (Eurostat, 2019; <https://www.openpolis.it/quanto-e-frequente-labbandono-scolastico-tra-gli-alunni-stranieri/>). In addition, 49% of immigrant students who do enter the 10th grade are at least one year older than the typical age while this share for

Table A1

Questions on Bullying and Victimization in the INVALSI Student Questionnaire

This school year how often have you:	
Victimisation	Bullying
Bullied/hassled by other students at school making fun of you?	Bullied/hassled other students at school by making fun of them?
Bullied/hassled by other students at school by insulting you?	Bullied/hassled other students at school by insulting them?
Bullied/hassled by other students at school by isolating you?	Bullied/hassled other students at school by isolating them?
Bullied/hassled by other students at school by beating you?	Bullied/hassled other students at school by beating them?

Notes: See INVALSI “Questionario Studenti” https://invalsireaprove.cineca.it/docs/attach/05_Questionario_STAMPA.pdf

from the 2013/14 and 2014/15 waves for which the Student Questionnaire contains a range of questions on bullying and victimisation.⁷ These data cover the universe of public primary schools,⁸ with about 529,000 student-level observations located in 3,534 different municipalities in Northern and Central Italian regions⁹ (out of a total of 8,100 across Italy). We chose to not include Southern regions as the presence of Lega was negligible in these regions in our period of analysis.

The section on bullying covers four questions: two on verbal bullying, one on bullying with respect to isolating individuals, and one on physical bullying. These questions are asked from the perspective of whether the respondents had been victims of bullying, or whether they had themselves taken part in bullying behaviour in this school year. English translations of these questions are presented in Table A1 together with a link to the original version.

For each of these questions students had to choose between the following answers: 1 (never), 2 (now and then), 3 (weekly), and 4 (daily). It is the latter two that fit with standard ideas of frequent bullying. For instance, *Olweus (1993, 1997)* discusses bullying and victimization as the case where students are exposed repeatedly and over time, to negative actions from one or more other students. As discussed in the following section, the timing of the Questionnaire also fits with our campaign period of analysis. We use these to generate dummy variables, *Victimisation* and *Bullying*, if a student has been bullied or has bullied others weekly or daily in at least one of the four ways (*Making Fun; Insult; Isolate; Beat*).¹⁰

Italian students is of 16%. Together, this leads to substantial non-random sorting and selection that makes it difficult to interpret estimates. With this said, we do find some (not statistically significant) evidence that Lega Nord campaigning increases the victimization of 10th grade immigrants (results not reported and available upon request).

⁷ In 2010/11 and 2011/12 waves the Student questionnaire included questions asking whether (i) the student was beaten; (ii) the student was forced to do something against his/her will; (iii) the student was stolen things, which would allow us to build a measure of victimisation. However, no information is available on whether students have undertaken bullying behaviour themselves. In addition, students could only answer yes or no, which is a different scale compared to the one available for the waves used in this study. The more recent waves do not include questions that allow us to measure either bullying or victimisation.

⁸ In Italy about 94% of primary school students attend public schools.

⁹ This number reflects the exclusion of Special Autonomy Regions and Southern Regions. Moreover, we exclude from our analysis classes with less than 10 pupils where teaching is likely organized into multigrade classes. It is also to be considered that given the large number of Italian municipalities with less of 500 inhabitants there are also municipalities without any primary school.

¹⁰ We adopt this approach as, in practice, the incidence of bullying and victimisation are highly correlated across the different categories. For instance, as shown in Table A2 in the Appendix, the correlation between the two different types of verbal victimisation (making fun and insulting) is equal to 0.608, p-value=0.000, while the correlation between these two variables in terms of bullying behaviour is also high (0.461, p-value=0.000). Similar high correlations are found also for the other measures of victimisation and bullying. In

Table A2
Correlation matrix for different measures of Victimization and Bullying

	VIC: making fun	VIC: insult	VIC: isolate	VIC: beat	BUL: making fun	BUL: insult	BUL: isolate	BUL: beat
VIC: making fun	1.000							
VIC: insult	0.600	1.000						
VIC: isolate	0.407	0.416	1.000					
VIC: beat	0.259	0.319	0.255	1.000				
BUL: making fun	0.144	0.154	0.114	0.156	1.000			
BUL: insult	0.144	0.198	0.144	0.211	0.440	1.000		
BUL: isolate	0.145	0.160	0.156	0.190	0.312	0.326	1.000	
BUL: beat	0.141	0.184	0.155	0.277	0.263	0.365	0.279	1.000

Notes: All the reported correlation rates are statistically significant at the 1 percent level.

Table A3
Descriptive Statistics

Variable	Mean	Std. Dev.	Obs
Victimisation, dummy	0.213	0.409	529,445
Victim of making fun, dummy	0.160	0.367	529,445
Victim of insult, dummy	0.110	0.313	529,445
Victim of isolate, dummy	0.085	0.278	529,445
Victim of beat, dummy	0.034	0.181	529,445
Victimisation (intensity)(D:1-4)	0.389	0.856	529,445
Victimisation (PCA)	0.000	1.468	529,445
Bullying, dummy	0.071	0.258	524,546
Bully making fun, dummy	0.031	0.173	528,310
Bully insult, dummy	0.027	0.162	528,342
Bully isolate, dummy	0.033	0.178	528,081
Bully beat, dummy	0.023	0.151	527,695
Bullying (intensity) (D: 1-4)	0.112	0.466	529,364
Bullying (PCA)	-0.006	1.402	524,546
Maths Score	63.282	18.844	528,539
Italian Score	63.242	17.162	504,739
Elections	0.256	0.437	529,445
Lega	0.458	0.498	529,445
Lega1	0.430	0.495	529,445
Lega2	0.310	0.462	529,445
Lega3	0.394	0.488	529,445
Immigrant	0.135	0.342	529,445
Immigrant I g.	0.042	0.200	529,445
Immigrant II g.	0.093	0.291	529,445
Year:2015	0.501	0.500	529,445
North	0.699	0.459	529,445
Female	0.496	0.500	529,445
Socio-economic status	0.151	0.936	529,445
Born II Quarter	0.246	0.431	529,445
Born III Quarter	0.267	0.442	529,445
Born IV Quarter	0.251	0.434	529,445
Early Enrol.	0.005	0.070	529,445
Post Enrol.	0.028	0.164	529,445
Class Size	20.938	3.714	529,445
Share Females	0.495	0.084	529,445
Share Immigrants	0.137	0.140	529,445

Notes: Data at student-level. Source: Invalsi, waves: 2013-2014 and 2014-2015. Data on Elections: Interior Ministry

To distinguish between Italian and non-Italian students we use a variable, that comes from the INVALSI dataset, called the “citizenship indicator”. This variable takes three different possible values “Italian”, “First generation immigrant” and “Second generation immigrant”. 13.5% of students in our data set are immigrants, 9.3% are second generation immigrants (students born in Italy to foreign-born parents) while the remaining 4.2% are first generation immigrants (children born abroad to foreign-born parents).

The dataset also provides information on a number of pupil and parental characteristics (gender, attendance of pre-primary school, parental working status and education). Information on the family back-

ground of the student are used by INVALSI to build an indicator of socio-economic status (called ESCS: Economic and Social Cultural Status)¹¹ through a principal component analysis, obtaining a continuous variable with zero mean and unitary standard deviation. We also have information on month of birth, and whether each student is either younger (*Early enrolled*) or older (*Late enrolled*) than a regular student. These are important for immigrant children in Italy who often have different school-age enrolment patterns with respect to native Italian students.¹² We also have information on the number of students enrolled in each class at the beginning of the school year (*Class Size*) and we also calculate the share of females (*Share Females*) and immigrants in each class (*Share Immigrants*).

Table A3 reports the summary statistics. About 21% of the students report that they were victims of bullying weekly or daily in one way or another (making fun, insult, isolate, beat). On the other hand, 7.1% declare that they have bullied others. About 70% of students in the sample are enrolled in schools located in the Northern part of the country, 50% are females. The average class size is 21 pupils.

Using information on the municipality where the school is located, we merge the INVALSI data with data from the Italian Interior Ministry on elections; we then build a dummy variable (*Elections*) taking the value of one for municipality *m* and year *t* (2014 or 2015) in which an election takes place, and zero otherwise. The municipal elections in our years of analysis occurred on the 25th May 2014 and the 31st May 2015.

Approximately 26% of the students in our sample are interviewed during electoral campaigns since in the two years about 66% of municipalities in our sample elected their mayors. As municipal electoral data are not available for “Special Autonomy Regions”,¹³ we discard these students from our analysis; they account for 15% of the population. Some of these regions are also bilingual (French or German), which may make their test scores less comparable.

The INVALSI tests were administered at the height of the electoral campaigns, between the 5th and the 8th of May. Municipal elections typically experience a very high turnout as they are perceived as highly salient by voters. Over 71% of eligible voters turned out in 2014 and

¹¹ This ESCS indicator is built in accordance to the one proposed in the OECD-PISA framework and considers parents’ occupation, educational attainment and possession of educational resources at home (for instance, the number of books). For a detailed description, see Volume II of the OECD-PISA 2015 Result or the INVALSI description.

¹² In Italy a student starts primary school in September of the calendar year (Jan-Dec), in which he or she turns six, e.g children born in 2014 start primary school in September 2020. Parents of children who are just too young for the cut-off (i.e. children born in January-April 2015 in our example) can freely choose to let their children start primary school a year earlier; this is typically correlated with a higher socio-economic background. It is not uncommon that recently arrived immigrants, who are strongly lagging in language skills or have a weaker academic background, are put in classes with students younger than them: in our data 65% of students attending a lower grade than their age are immigrants.

¹³ Valle d’Aosta, Trentino-Alto Adige, Friuli-Venezia Giulia, Sicilia and Sardegna.

Table A4
Correlation matrix different measures of Lega Nord

	Lega	Lega1	Lega2	Lega3
Lega	1.000			
Lega1	0.567	1.000		
Lega2	0.502	0.379	1.000	
Lega3	0.483	0.298	0.831	1.000

Notes: All the reported correlation rates are statistically significant at the 1 percent level.

64% in 2015. These are a little below the turnout for the most proximate general election (75% in 2013).

Data from the 2011 Italian National Census are used to gather information on municipal characteristics that we use as controls: population size, the number of employed individuals and the educational attainment of the population, municipality area and altitude.

In the municipal electoral system each mayoral candidate is supported by one or more lists of candidates for the municipal council. The lists linked to the elected mayor are automatically awarded a clear majority in the council. The balance of power between the mayor and the council is strongly tipped in favour of the mayor: her resignation triggers new elections and she has the power to nominate or dismiss members of the executive committee (*Giunta*), to whom she may delegate specific tasks.

This electoral system allows us to pinpoint which mayoral candidates are supported by (also or exclusively) a Lega Nord list and calculate the share of votes Lega Nord obtained in each municipal election. A complicating factor is that national political parties do not always participate in mayoral elections: especially in smaller municipalities where local politics is dominated by local voters' associations (*Liste Civiche*), which cannot be linked directly to major parties.¹⁴ With this in mind, a challenge is how to identify the municipalities where Lega Nord is active in a way that it potentially affects the social climate. We adopt a number of approaches to do this.

In our preferred definition we calculate the maximum vote share in each municipality for Lega Nord in municipal elections for the period 1995-2013, the timespan leading up to our period of analysis. We then define a "Lega" dummy, which takes value 1 in those municipalities where this vote share is higher than the average (15.7%). This definition is therefore time-invariant and aims at pinpointing those localities (35.3% of municipalities in our sample) where support for Lega Nord can be considered as entrenched (45.8% of students in our sample live in those municipalities). The main advantage of this approach is that, over longer periods of time (20 years), the probability of observing candidates running under the national-party label of Lega Nord increases, allowing us to overcome problems related to when these candidates run under "Liste Civiche". Nonetheless, the potential for measurement error remains, and this is likely to take the form of missing some Lega Nord candidates in less populated municipalities. While, as we show, our results are robust to a range of classification approaches, this measurement error is likely to bias our estimates towards zero.

An alternative approach that we undertake is to calculate Lega Nord strength in the municipality using municipal level results at the 2013 election for the Italian Parliament where local voters' associations ("Liste Civiche") do not run. As shown in Table A3, using this definition (*Lega1*) about 43% of students live in municipalities where Lega Nord

¹⁴ In very small villages, the presence of Lega Nord or any other established political party in municipal elections is, in practice, difficult to ascertain as mayoral candidates run "under generic "Lista Civica"" party labels (instead of National labels such as Lega Nord, Partito Democratico, etc.). In many cases these mayoral candidates are indeed non-partisan figures, not belonging to any national political party. However, this may also hide situations in which local politicians with locally known partisan allegiance decide – for whatever reason – to run under a non-partisan local label.



Fig. A1. Italian regions. Special autonomy (darkest), in-sample northern and central regions (intermediate), others (palest)

has obtained a vote share higher than 8.8% which is the average value in our sample.

In order to have measures of Lega Nord support more strictly linked to results obtained in recent elections, we also focus on the vote share for Lega Nord in the latest municipal elections and define the dummy variable *Lega2* for those students (31%) in municipalities where this vote share is higher than the average (5.7%).

Finally, we develop a measure that considers whether a Lega Nord member was running for the mayoral position during the municipal elections occurring in the period covered by our dataset (2014-2015). This measure, *Lega3*, while is the most affected by problems deriving from the presence of *Liste Civiche*, has the advantage of being related to the elections taking place in the period in which students answered to the survey collecting data on bullying. Using this measure, there were about 39.4% of students living in municipalities in our sample where a Lega Nord candidate was running for a mayoral position.

It is worth noting that in practice all of these measures are strongly correlated to each other (see Table A4 in the Appendix of the paper). We are aware that the measures relying on municipal elections are at risk of miscoding: "Liste Civiche" locally known to be linked to Lega Nord would not be detected and would be coded as zero. As this would bias downward our estimates of the effects of Lega Nord on the outcomes of interest, we believe it does not impinge on the credibility of our results.

More importantly, we also use alternative measures of Lega Nord – for example, the percentage of votes obtained in each municipality by Lega Nord at the Parliamentary elections – that are not affected at all by the problem of *Liste Civiche*, and we obtain very similar results.

As shown in Table A5, in which we report summary statistics for a number of demographic characteristics (from 2011 Census), municipalities in which Lega Nord (*Lega*) has support differ from other municipalities as they are more populated, with a larger fraction of employed

Table A5
Summary Statistics of Municipalities where Lega Nord has High/Low Electoral Support

Variable	Lega Nord Municipalities			Non Lega Nord Municipalities		
	Mean	Std. Dev.	Obs	Mean	Std. Dev.	Obs
Population	11665.14	46943.9	1,340	8925.774	58834.37	2,191
Employment	0.456	0.197	1,340	0.426	0.113	2,191
Education	8.962	0.518	1,340	8.904	0.517	2,191
Perc. Imm.	0.096	0.042	1,287	0.082	0.040	2,151
Elderly	0.179	0.038	1,340	0.224	0.043	2,191
Altitude	186.612	179.042	1,340	286.183	231.255	2,191
Area, sq. km	25.702	32.049	1,340	41.206	58.686	2,191

individuals, slightly higher average education levels, and with larger flows of immigrants.¹⁵ These differences might imply that our estimates are smaller than if Lega was more randomly distributed with respect of municipality characteristics (or even concentrated in poorer, lower average education locations as is the case with far-right parties in many other settings). In fact, as shown in the literature, more educated and wealthier individuals show more positive attitudes toward immigrants and should be less affected by the populist rhetoric.

In [Figure A1](#) of the appendix we show “special autonomy” regions (darkest shade), which are excluded from our sample, and northern and central regions (intermediate shade, in which Lega Nord was present at the time of our analysis (Piemonte, Lombardia, Veneto, Emilia Romagna, Liguria, Toscana, Marche, Umbria, Lazio). We categorize as “Lega” municipality approximately 14% of municipalities in Piemonte (most Western large region of Northern Italy), about 61% of municipalities in Lombardia (at the centre of Northern Italy), 70% of municipalities in Veneto (most Eastern large region), but also 5% of municipalities in Umbria (central Italy).

3. Victimization and bullying across immigration status

Before moving to our main estimates, we first seek to motivate our research in two ways. First, we examine the incidence of bullying and its association with immigrant status and one important outcome for which we have data, educational attainment. This is important as these data on bullying has not previously been used extensively and we seek to (a) demonstrate the underlying patterns of bullying incidence in our data and (b) understand whether there are, at least, robust associations between bullying and educational outcomes.

Immigrant students are at a higher risk of being victimised by their peers. 25.4% of 5th grade immigrant students suffer some victimisation at least every week compared to 20.6% for native students. At the same time, immigrant students are more likely to report having bullied others compared to native students: about 9.9% of immigrant students report having themselves conducted some form of bullying behaviour (every week or every day) compared to 6.8% of natives.

Similar results are shown in [Table 1](#) in which we report OLS estimation results when considering as outcome variables alternatively *Victimization* (columns 1 to 4) and *Bullying* (columns 5 to 8) taking a value of one if it occurred weekly or daily, and zero otherwise. In columns (1) and (5) we include only among the regressors the dummy variable Immigrant and we find that immigrant students are at a higher risk of being victimised by their peers (4.7 percentage points). At the same time, immigrant students are more likely to report having bullied others compared to native students (3.0 percentage points). Similar findings are found after including controls for individual characteristics (gender, socio-economic status, quarter of birth and whether a student is regu-

¹⁵ Notice also that smaller municipalities are more likely to be dominated by non-partisan mayoral candidates and in these Lega Nord is typically allied with other conservative parties.

larly enrolled in the school), a dummy for the year 2015 and municipal fixed effects (columns 2 and 6).¹⁶ Once observable characteristics and sorting across municipalities is taken into account immigrant students have a higher probability of victimization (bullying) of about 3 (1.6) percentage points.¹⁷

In columns 3, 4, 7 and 8 we distinguish between first (foreign-born students with foreign citizenship) and second-generation immigrants (students born in Italy to at least one immigrant parent). These estimates demonstrate that 1st generation immigrants are victimised more (6.2 percentage points) than native students. The effect is smaller for 2nd generation immigration children (4.1 percentage points more). For bullying we find similar results, with 2nd generation immigrants less involved in this type of behaviour compared to 1st generation immigrants, however both 1st and 2nd generation immigrants are more likely to report having bullied others when compared to native students.

These differences, we argue, are large, even if smaller than the raw differences we showed earlier. This points to the fact that some of the differences in bullying behaviour can be accounted by the characteristics of immigrants and/or their location. Together, these results are consistent with existing evidence from other contexts. Immigrants suffer more bullying victimisation, some part of these differences reflects non-random sorting into locations associated with higher levels of bullying victimisation, but sizeable statistically significant differences remain.

Behaviourally, the phenomena of victimization and bullying may be intertwined in ways that may not be obvious. Individuals react to psychological or physical violence differently. It may be that in this case violence begets violence which would fit with evidence from other fields demonstrating that victims and bullies may often switch position (see for instance [Zych et al., 2018](#) and [Zych et al., 2019](#)).¹⁸

Comparing the estimated coefficients to the sample means we find that immigrants are approximately 10% more likely to be a victim of being made fun of, 15% more likely to have been insulted, and 24% more likely to either have been a victim of isolation or physical violence.

Next, we show in [Table 2](#) conditional associations between bullying and academic achievement that result from estimates of models in which we consider as outcome variables the fraction of correct answers (from 0 to 100) in Italian (columns 1-2) and Maths (columns 3-4). Along with a dummy variable for immigrant students we include among the

¹⁶ These results and the others reported in the paper are unchanged if instead we use school fixed effects and cluster errors at the school level. Tables are available upon request.

¹⁷ Results going in the same direction are found when we estimate linear probability models of each of the eight victimisation and bullying outcomes available in the data. These results (not reported and available upon request) demonstrate a number of consistent patterns. Immigrants are more likely to be a victim of all forms of bullying even after controlling for a range of characteristics and municipal fixed effects.

¹⁸ In our data 27% of immigrant students who have suffered some kind of bullying on a weekly or daily basis also report that they have carried out such behaviour towards other students in the same time period. This percentage is smaller (about 22%), but still of substantial magnitude for native students.

Table 1
Immigrants and Incidence of Victimization and Bullying

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Victimisation				Bullying			
Immigrant	0.047*** (0.002)	0.031*** (0.002)			0.030*** (0.001)	0.016*** (0.001)		
Immigrant I g.			0.062*** (0.003)	0.042*** (0.003)			0.045*** (0.002)	0.022*** (0.002)
Immigrant II g.			0.041*** (0.002)	0.028*** (0.002)			0.023*** (0.001)	0.014*** (0.001)
Individual Characteristics	NO	YES	NO	YES	NO	YES	NO	YES
Year dummy	NO	YES	NO	YES	NO	YES	NO	YES
Municipal Fixed Effects	NO	YES	NO	YES	NO	YES	NO	YES
Observations	529445	529445	529445	529445	524546	524546	524546	524546
Adjusted R-sq.	0.002	0.018	0.002	0.018	0.002	0.025	0.002	0.025

Notes: OLS Estimates. The dependent variable is *Victimisation* in columns (1)-(4), *Bullying* in columns (5)-(8).

Individual characteristics include Female; Socio-economic status; Quarter of Birth Dummies; Early Enrolment and Post Enrolment. Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people. Standard errors (corrected for heteroskedasticity) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

Table 2
Test Scores, Immigrants and Victimization

	(1)	(2)	(3)	(4)
	Italian Score	Italian Score	Maths Score	Maths Score
Immigrant	-9.422*** (0.084)	-5.462*** (0.168)	-7.565*** (0.089)	-3.542*** (0.212)
Bullied	-3.541*** (0.064)	-2.706*** (0.066)	-3.124*** (0.069)	-2.782*** (0.089)
Immigrant*Bullied	-1.394*** (0.174)	-1.395*** (0.156)	-1.280*** (0.182)	-1.394*** (0.177)
Individual Characteristics	NO	YES	NO	YES
Year dummy	NO	YES	NO	YES
Municipal Fixed Effects	NO	YES	NO	YES
Observations	511795	511472	536173	535793
Adjusted R-sq.	0.047	0.150	0.027	0.131

Notes: OLS Estimates. Odd cols: just what is shown. Even cols: individual controls and municipal Fixed Effects. Individual controls include Female; Socio-economic status; Quarter of Birth Dummies; Early Enrolment and Post Enrolment. Standard errors (corrected for heteroskedasticity) are reported in parentheses.

regressors an interaction term indicating an immigrant who reports being bullied. This may pick up either differences in severity of bullying for immigrants, differences in the effect of bullying on immigrant educational performance, or some combination of both. In practice, it is challenging to establish a causal link between being victimised and having lower academic achievement. There are likely important omitted variables that may cause both victimisation and academic achievement or simultaneity bias. For instance, children with difficult home lives may be more easily singled out by bullies and perform poorly on academic tests.

We report results with and without controls. Unconditional effects suggest that being the victim of bullying is associated with a 3.5 percentage point reduction in Italian test scores and a 3.1 percentage point reduction in math scores. There are large differences in average performance between native and immigrant students, 9.4 percentage points in Italian and 7.5 percentage points in mathematics. There is also some suggestive evidence that victimisation has additional negative effects on immigrant students. Including municipal fixed effects and our usual battery of individual controls, including socio-economic background, markedly reduces the immigrant penalty on test scores but does not substantively influence the relationship between being bullied and test scores, nor the additional negative effect for immigrants.

While we stress again that these are not interpretable causally, these results are informative insofar as our self-reported bullying information is correlated with deleterious educational outcomes. In combination with the results in Table 1, this shows that immigrants are more

likely to be victims of bullying and that this, in turn, is likely to have important negative impacts on academic achievement.

4. Methodology

As discussed earlier, there are a range of confounding factors that make it difficult to assess the effect of a hostile social climate toward immigrants on student bullying. For example, anti-immigrant sentiments are typically correlated with other social aspects that may also affect the degree of violence observed in schools. A source of exogenous variation is required to disentangle the impact of social and political climate on bullying and victimisation.

Our identification strategy exploits the change in social climate and political debate on immigration induced by the occurrence of local elections in municipalities where Lega Nord, a party with a core anti-immigration political platform, had substantial support. Our approach relies on the fact that in Italy municipalities are subject to independent terms of office for their mayors. Even if elections are scheduled far in advance, and are therefore predictable, the occurrence of an electoral campaign can be considered as exogenous to determinants of bullying behaviour, due to the different timing of terms across municipalities. Using municipality fixed effects and elections dummy we can analyse the effect of the electoral campaign on the bullying behaviour of students living in that locality. Moreover, through our Lega Nord dummy we can determine if areas where Lega Nord has support differ from others in terms of bullying behaviours and finally through interaction terms we investigate if the electoral campaign affects bullying in localities in

Table 3
The impact of Lega Nord Election Campaigning on Victimization

	(1)	(2)	(3)	(4)	(5)
Immigrant* Lega Elections	0.020** (0.009)	0.025** (0.011)	0.027** (0.011)	0.023** (0.010)	0.023*** (0.009)
Elections	-0.000 (0.003)	-0.000 (0.004)	0.004* (0.003)	0.002 (0.003)	0.001 (0.003)
Lega	0.002 (0.003)	0.002 (0.003)	0.002 (0.002)		
Immigrant	0.038*** (0.004)	0.033*** (0.004)	0.032*** (0.004)	0.032*** (0.004)	0.032*** (0.003)
Immigrant* Elections	-0.010 (0.007)	-0.014 (0.009)	-0.015 (0.009)	-0.012 (0.008)	-0.012** (0.006)
Elections* Lega	-0.004 (0.004)	-0.004 (0.005)	-0.005 (0.004)	-0.000 (0.004)	-0.000 (0.004)
Immigrant* Lega	-0.008 (0.005)	-0.008 (0.005)	-0.009* (0.005)	-0.008 (0.005)	-0.010** (0.004)
Female	-0.070*** (0.001)	-0.069*** (0.001)	-0.069*** (0.001)	-0.069*** (0.001)	-0.069*** (0.001)
Socio-economic status	-0.016*** (0.001)	-0.015*** (0.001)	-0.017*** (0.001)	-0.017*** (0.001)	-0.018*** (0.001)
Class Size		-0.001*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)	-0.001*** (0.000)
Share Females		-0.053*** (0.008)	-0.054*** (0.008)	-0.059*** (0.009)	-0.054*** (0.013)
Share Immigrants		0.034*** (0.008)	0.029*** (0.008)	0.032*** (0.008)	0.035*** (0.009)
Municipal Characteristics	NO	NO	YES	NO	NO
Year dummy	YES	YES	YES	YES	YES
Quarter of birth dummies	YES	YES	YES	YES	YES
Municipal Fixed Effects	NO	NO	NO	YES	NO
School Fixed Effects	NO	NO	NO	NO	YES
Observations	529445	529445	528806	529445	529445
Adjusted R-sq.	0.011	0.012	0.012	0.018	0.026
Mean of Dep Var.	0.213	0.213	0.213	0.213	0.213
Relative Effect	9.4%	11.7%	12.7%	10.8%	10.8%

Notes: OLS Estimates. The dependent variable is Victimization. Specifications include also controls for Early Enrolment and Post Enrolment; Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

which Lega Nord has more traction and popular support, and if this effect is concentrated among immigrant pupils.

Therefore, we aim to compare how elections affect bullying behaviours towards immigrants (relative to natives) in municipalities in which Lega is an active political actor relative to how they affect these bullying behaviours in municipalities where Lega Nord is not active. Practically speaking, our regressor of interest will be the triple interaction between the *Elections* dummy, the *Lega Nord* dummy and the *Immigrant* dummy. We exploit the occurrence of the electoral campaign in Lega-supporting localities as an exogenous variation in the salience of immigration issues and anti-immigrant sentiment.

Our main estimating equation takes the form:

$$Y_{imt} = \alpha Elections_{mt} + \gamma Immigrant_{im} + \delta Lega_m + \varphi Lega_m * Elections_{mt} + \theta Lega_m * Immigrant_{im} + \rho Elections_{mt} * Immigrant_{im} + \beta Immigrant_{im} * Lega_m * Elections_{mt} + \pi' X_{imt} + \mu_m + \tau_t + \varepsilon_{imt}$$

where Y is a bullying outcome of student i in municipality m in year t . *Elections* indicates that an election takes place in municipality m at time t , *Immigrant* if student i is an immigrant, *Lega* is a dummy for *Lega Nord* municipalities, μ are municipality fixed effects (in alternative models we use municipal controls or school fixed effects), τ is a time dummy, and β is the main parameter of interest. This provides the effect of Lega Nord campaigning on the bullying victimization and bullying behaviour of immigrants. X is a vector of individual controls.

This represents a diff-in-diff-in-diff (DDD) strategy. Defining Y as the average for the outcome of our interest (Bullying, Victimization), our

estimate of interest is given by:

$$(Y_{LEGA; Elections} - Y_{NO LEGA; Elections}) - (Y_{LEGA; NO Elections} - Y_{NO LEGA; NO Elections})$$

calculated only for immigrant students. Our strategy then subtracts from this the corresponding diff-in-diff for Italian students (which is practically zero).

We estimate linear probability models of several variants of Equation 1, and as our main explanatory variable is defined at the municipal level we allow for clustering of errors at the municipality level.

5. Results

Table 3 reports our main results. The dependent variable is *Victimization*, that is, if a student has been bullied in any way weekly or daily. We build up the specification gradually. In column (1) we include as controls only *Female*, *Socio-Economic Status*, quarter of birth dummies and a year dummy. In column (2) we additionally include *Class Size*, *Share Females* and *Share Immigrants*. Column (3) includes municipal characteristics (population size, average education, employment rate, elderly population (%), area, altitude) while in column (4) we include municipal fixed effects (which remove any time-invariant municipality variation). Finally, in column (5) instead of controlling for municipal fixed effects we include school fixed effects.

Consistent with the earlier estimates, immigrants have in general a higher incidence of victimization (3 or 4 percentage points more) than native students. Election campaigns where Lega Nord is not active leaves this unchanged. However, in municipalities with a high level of Lega

Table 4
The impact of Lega Nord Election Campaigning on Bullying

	(1)	(2)	(3)	(4)	(5)
Immigrant* Lega Elections	0.011** (0.006)	0.017** (0.008)	0.018** (0.008)	0.015** (0.007)	0.012** (0.006)
Elections	-0.004*** (0.002)	-0.005*** (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)
Lega	-0.005** (0.002)	-0.006*** (0.002)	-0.006*** (0.001)		
Immigrant	0.018*** (0.002)	0.012*** (0.003)	0.012*** (0.003)	0.012*** (0.003)	0.013*** (0.003)
Immigrant* Elections	-0.006* (0.004)	-0.011* (0.006)	-0.012* (0.007)	-0.009 (0.006)	-0.007 (0.004)
Elections* Lega	-0.001 (0.003)	-0.001 (0.003)	0.000 (0.002)	0.003 (0.002)	0.003 (0.002)
Immigrant* Lega	0.001 (0.003)	0.000 (0.003)	-0.000 (0.003)	-0.001 (0.003)	-0.002 (0.003)
Female	-0.065*** (0.001)	-0.065*** (0.001)	-0.065*** (0.001)	-0.065*** (0.001)	-0.065*** (0.001)
Socio-economic status	-0.011*** (0.001)	-0.010*** (0.001)	-0.011*** (0.001)	-0.011*** (0.001)	-0.011*** (0.001)
Class Size		-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Share Females		-0.012** (0.006)	-0.012** (0.006)	-0.008 (0.006)	0.003 (0.010)
Share Immigrants		0.039*** (0.007)	0.036*** (0.006)	0.041*** (0.006)	0.025*** (0.007)
Municipal Characteristics	NO	NO	YES	NO	NO
Year dummy	YES	YES	YES	YES	YES
Quarter of birth dummies	YES	YES	YES	YES	YES
Municipal Fixed Effects	NO	NO	NO	YES	NO
School Fixed Effects	NO	NO	NO	NO	YES
Observations	529445	529445	528806	529445	529445
Adjusted R-sq.	0.011	0.012	0.012	0.018	0.026
Mean of Dep Var.	0.071	0.071	0.071	0.071	0.071
Relative Effect	15.4%	23.8%	25.2%	21.0%	16.8%

Notes: OLS Estimates. The dependent variable is Bullying. Specifications include also controls for Early Enrolment and Post Enrolment; Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

Nord support, electoral campaigns lead to a higher incidence of victimisation (about 2 p.p. more) for immigrant students, which is statistically significant at the 5% level. This effect is not apparent for native students: i.e. the coefficient of the interaction between *Lega Nord* and *Elections* is near zero and not statistically significant. This pattern holds throughout all of our specifications.

Table 4 reports analogous results, where the dependent variable is whether the student has bullied others weekly or daily. The results follow a similar pattern to those for victimisation, but are generally smaller and statistically weaker. Electoral campaigns in areas where *Lega Nord* is very active increases the likelihood of an immigrant child engaging in bullying by around 1%, statistically significant at the 5% level.

In summary, these results demonstrate that electoral campaigns where *Lega Nord* is a main actor lead to an increase in the probability that immigrants are victimised and in the probability that they report having bullied others.

We next examine whether these effects are heterogeneous according to students' demographic characteristics and to the socio-economic environment in which they live.

First, we are able to distinguish between first generation immigrants and second-generation immigrants. As shown in a large literature (see, for example, De Paola and Brunello, 2016; Dustmann et al. 2012), second generation students, who face lower language and cultural barriers, tend to display better academic outcomes compared to their first-generation counterparts. For similar reasons, we would expect that, being more integrated, they are less affected by a worsening of the social climate towards immigrants compared to foreign-born students. To investigate this issue, we re-estimate our main models including separate dummy variables for first and second generation immigrants and inter-

action terms between these dummies and the dummy variables *Lega Nord* and *Elections*. These results are reported in Table 5. We estimate the model including alternatively municipal fixed effects (odd columns) and school fixed effects (even columns).

These results provide evidence that the effect of *Lega Nord* electoral campaigns on victimisation is larger for 1st generation immigrant children. These campaigns lead to increases in the likelihood of victimisation of about 3 percentage points. This effect is smaller for 2nd generation immigration children and is not statistically significant at standard levels. For bullying, there is little difference between first and second-generation immigrants.

Here we explore both variations in municipal settings potentially associated with greater underlying hostility towards immigrants, and immigrant characteristics that may potentially influence likelihood of being bullied. Specifically, we consider the potential for gender, socio-economic background, average education at the municipal level, share of immigrant in the local population, size of the school's municipality.

Table 6 (Panel A) first reports these split sample estimates for gender and socio-economic background (below and above the median). These demonstrate little difference in the effect across gender. There is also little difference in the effect of *Lega Nord* campaigning on victimization across socio-economic status, although there is some evidence that immigrant children from more well-off families react by bullying others more.

In Panel B of Table 6 we turn our attention to a number of municipal features. We find that as regards victimization our results are driven by municipalities characterised by low educational levels – below the median value – (see columns 1-2), while involvement in bullying others is more likely for immigrants living in more wealthy municipalities.

Table 5
The impact of Lega Nord Campaigning on Victimization and Bullying of First and Second Generation Immigrants

	(1)	(2)	(3)	(4)
	Victimisation	Victimisation	Bullying	Bullying
Imm.1st Gen*Lega*Elections	0.029* (0.015)	0.028* (0.015)	0.015 (0.010)	0.012 (0.010)
Imm. 2nd Gen*Lega*Elections	0.020 (0.013)	0.020* (0.012)	0.014 (0.009)	0.011 (0.007)
Individual Characteristics	YES	YES	YES	YES
Municipal Characteristics	NO	NO	NO	NO
Year dummy	YES	YES	YES	YES
Municipal Fixed Effects	YES	NO	YES	NO
School Fixed Effects	NO	YES	NO	YES
Observations	529445	529445	524546	524546
Adjusted R-sq.	0.018	0.026	0.025	0.034

Notes: OLS estimates. We estimate specifications (4) and (5) of Table 3 with alternatively municipal or school fixed effects. Controls include: Elections; Lega; Elections*Lega; Imm.1st Gen*Elections; Imm.2nd Gen*Elections; Imm.1st Gen*Lega; Imm.2nd Gen*Lega; Class Size; Share Females; Share Immigrants. Individual controls: Female; Socio-economic status; Early Enrolment and Post Enrolment. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

Table 6
Heterogeneous effects on Victimization: Gender and Socio Economic Background

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Victimisation		Bullying		Victimisation		Bullying	
PANEL A								
	Boys	Girls	Boys	Girls	Low SES	High SES	Low SES	High SES
Immigr.*Lega*Elections	0.024 (0.015)	0.022* (0.012)	0.017 (0.010)	0.011* (0.006)	0.020* (0.010)	0.026 (0.020)	0.007 (0.007)	0.023** (0.011)
Observations	266687	262758	263869	260677	277467	251978	274673	249873
Adjusted R-sq.	0.012	0.011	0.013	0.007	0.019	0.015	0.028	0.021
PANEL B								
	Low Education	High Education	Low Education	High Education	Low share immigrants	High share immigrants	Low share immigrants	High share immigrants
Immigr.*Lega*Elections	0.024** (0.010)	0.014 (0.020)	0.011 (0.007)	0.021* (0.012)	0.023* (0.014)	0.024* (0.013)	0.005 (0.008)	0.019* (0.010)
Observations	292474	236971	289930	234616	261405	268040	259161	265385
Adjusted R-sq.	0.021	0.015	0.028	0.023	0.018	0.018	0.026	0.025
Individual Characteristics	YES	YES	YES	YES	YES	YES	YES	YES
Municipal Characteristics	NO	NO	NO	NO	NO	NO	NO	NO
Year dummy	YES	YES	YES	YES	YES	YES	YES	YES
Municipal Fixed Effects	YES	YES	YES	YES	YES	YES	YES	YES

Notes: OLS Estimates. We estimate specification (4) of Table 3. Controls include: Elections; Lega; Elections*Lega; Imm.1st Gen*Elections; Imm.2nd Gen*Elections; Imm.1st Gen*Lega; Imm.2nd Gen*Lega; Class Size; Share Females; Share Immigrants. Individual controls: Female; Socio-economic status; Early Enrolment and Post Enrolment. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

The share of immigrants in the local population (using the median as a threshold, see columns 5-8) has a less obvious effect: immigrants' probability of being victimised is similar in localities with a lower or a higher share of immigrants, but are more likely to be bullies in localities with a higher share of immigrants. Both of these outcomes are significant only at the 10% level. Moreover, there is little evidence that the share of immigrants in the classroom or the size of the school's municipality is a relevant mediating factor (results available upon request).

6. Robustness Checks

Having established an effect of Lega Nord electoral campaigning on bullying victimisation of immigrants, we now seek to examine the robustness of these estimates to a range of potential issues.

First, we examine whether our results are sensitive to alternative measures of our dependent variable. First, we use a principal component analysis to construct measures of victimisation and bullying, *Victimisa-*

tion (PCA) and *Bullying (PCA)*,¹⁹ from the 4 different questions for each (using the 4 dummy variables we have built) and using the first principal component. We then estimate our preferred models using these alternative dependent variables, and these are reported in column (1) and (4) of Table 7. The results for victimisation demonstrate a larger effect (6.5 percentage point increase) on immigrant victimisation, although this estimate is less precise and statistically significant at the 10 percent level. The estimate for bullying is also larger (7.6 percentage points), statistically significant at 10 percent level.

As another alternative outcome variable, in columns (2) and (5), we consider two categorical variables, taking values from 0 to 4, measuring victimisation intensity (*Victimisation (Intensity)*), and bullying intensity, (*Bullying (Intensity)*). The value 0 occurs for students who have never been bullying/victimized in any way (on weekly or daily basis), while the value 4 is observed for students who have been bullying/victimized

¹⁹ These are standardized variables with mean 0 and Standard Deviation corresponding to the square root of the corresponding eigenvalue of the first component.

Table 7
The impact of Lega Nord Campaigning using alternative measures of Victimization and Bullying

	(1)	(2)	(3)	(4)	(5)	(6)
	Victimization (PCA)	Victimization (int.)	Victimization (Only Isolate/Beat)	Bullying (PCA)	Bullying (int)	Bullying (Only Isolate/Beat)
Immigrant* Lega* Elections	0.065* (0.037)	0.037* (0.022)	0.007 (0.007)	0.076* (0.043)	0.025* (0.014)	0.014** (0.006)
Individual Characteristics	YES	YES	YES	YES	YES	YES
Year dummy	YES	YES	YES	YES	YES	YES
Municipal Fixed Effects	YES	YES	YES	YES	YES	YES
Observations	529445	529445	529445	524546	524546	529364
Adjusted R-sq.	0.020	0.020	0.011	0.024	0.024	0.018

Notes: OLS Estimates. We estimate specification (4) of Table 3. Controls include: Immigrant; Elections; Lega; Immigrant*Elections; Immigrant*Lega; Elections*Lega; Class Size; Share Females; Share Immigrants. Individual characteristics: Female; Socio-economic status; Early Enrolment and Post Enrolment. Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

Table 8
The impact of Lega Nord Campaigning on Victimization and Bullying using alternative measures of Lega Nord.

	% Lega 2013 Parliament Elections		% Lega Recent Mun. Elections		Lega contesting Mun Elections in 2014 or 2015	
	(1)	(2)	(3)	(4)	(5)	(6)
Immigrant* Lega* Elections	Victimization 0.021** (0.010)	Bullying 0.007 (0.007)	Victimization 0.022** (0.011)	Bullying 0.014* (0.008)	Victimization 0.027** (0.011)	Bullying 0.016** (0.007)
Individual Characteristics	YES	YES	YES	YES	YES	YES
Year Dummy	YES	YES	YES	YES	YES	YES
Municipal Fixed Effects	YES	YES	YES	YES	YES	YES
Observations	529445	524546	529445	524546	529445	524546
Adjusted R-sq.	0.018	0.025	0.018	0.025	0.018	0.025

Notes: OLS Estimates. We estimate specification (4) of Table 3. Controls include: Immigrant; Elections; Lega; Immigrant*Elections; Immigrant*Lega; Elections*Lega; Class Size; Share Females; Share Immigrants. Individual characteristics: Female; Socio-economic status; Early Enrolment and Post Enrolment. Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

weekly or daily in all four ways.²⁰ These estimates demonstrate again a statistically significant increase in victimisation, and a statistically insignificant increase on bullying behaviour.²¹

Finally, in columns (3) and (6) we focus only on two types of bullying, Isolate and Beat, that may be less subject to individual perceptions of events, and build two dummy variables taking the value of one for students who declare that they have been Isolated or Beaten (or have isolated and beat someone either weekly or daily). We find results that are qualitatively similar to those discussed above.

These results remain qualitatively equivalent when we use alternative sets of controls and when we include school fixed effects instead of municipal fixed effects.

We next examine alternative approaches to defining a municipality as having an active Lega Nord presence. To this point, our measure of Lega Nord was based on the maximum vote share for Lega Nord in mu-

²⁰ Alternatively, we have also used as outcome variable a categorical variable (taking values from 0 to 12) obtained by summing values taken by the four different indicators of bullying/victimisation – each taking values from 0 (never) to 3 (every day). Again, we find results qualitatively similar to those reported in Table 7. However, it is worthwhile to notice that this outcome variable represents a measure that is not able to distinguish between cases in which only a certain type of bullying/victimisation occurs very frequently and cases in which different types of bullying/victimisation occur occasionally (for instance we will observe a value of 4 for a student who now and then has experiences all the different types of bullying considered in the questionnaire and a student who has been beaten every day).

²¹ Since our intensity measures take 5 discrete values, for these measures we use also Ordered Probit models (including provincial fixed effects) and we obtain very similar results (estimates not reported).

nicipal elections in the period 1995-2013. We seek to examine the robustness of our results to three alternative measures of Lega Nord which we denote *Lega1* through to *Lega3*. First, we examine results at the 2013 election for the Italian Parliament (at the municipal level), and classify as Lega municipalities those with a percentage of Lega votes above the Centre-North average (*Lega1*). Second, we use the maximum vote share for Lega Nord in the municipal elections taking place in the period 2010-2015 (*Lega2*), the ones in which the incumbent mayor at the time of the exams we focus on was elected. Finally, we focus on whether a Lega Nord member was running for the mayor position for the municipal elections in the period that we examine (2014-2015) (we exclude candidates that obtained less than 5% of votes) (*Lega3*). Results using these alternative definitions are reported in Table 8. For victimisation, these results are essentially unaffected by these alternative measures of Lega Nord electoral involvement. Again, bullying is more sensitive.

Related to these alternative definitions we also explored whether there was evidence of a relationship between the vote share of Lega Nord (counted as an average of prior elections in the municipality) and victimisation / bullying effects during election campaigns. First, in columns 1 and 2 of Table 9 we estimate variants of our main models replacing our Lega Nord indicator (and interactions) with vote share. These provide some evidence that as the share of Lega Nord votes increases, bullying towards immigrants also tends to increase.

In practice, these effects are likely to be non-linear. It could be that the Lega effect is less important in municipalities where Lega has a very strong support while where elections are more uncertain local politicians might be induced to exacerbate the electoral campaign using the immigration issues. To shed some light on this we have investigated if there is a concave relationship between the Vote Share for Lega Nord

Table 9
The Impact of Lega Nord Campaigning on Victimization and Bullying, Linear and Quadratic Effects of Lega Nord Vote Share

	Linear Vote Share Effects		Quadratic Vote Share Effects	
	(1)	(2)	(3)	(4)
	Victimisation	Bullying	Victimisation	Bullying
Immigrant*Elections*Percentage Votes Lega	0.062** (0.027)	0.025 (0.018)	0.203*** (0.078)	0.125** (0.049)
Immigrant*Elections*Percentage Votes Lega Sq.			-0.264** (0.124)	-0.186** (0.074)
Individual Characteristics	YES	YES	YES	YES
Year Dummy	YES	YES	YES	YES
Municipal Fixed Effects	YES	YES	YES	YES
Observations	528806	523916	528806	523916
Adjusted R-sq.	0.018	0.025	0.018	0.025

Notes: OLS Estimates. We estimate specification (4) of Table 3. Controls include: Immigrant; Elections; Lega; Immigrant*Elections; Immigrant*Lega; Elections*Lega; Class Size; Share Females; Share Immigrants. Individual characteristics: Female; Socio-economic status; Early Enrolment and Post Enrolment. Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people. Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

Table 10
The impact of Lega Nord Campaigning on Victimization and Bullying. Placebo

	Fake Elections		Fake Lega	
	(1)Victimisation	(2)Bullying	(3)Victimisation	(4)Bullying
Immigrant*Lega*PlaceboElections	0.004 (0.023)	-0.001 (0.015)		
Immigrant*PlaceboLega*Elections			-0.015 (0.023)	0.002 (0.015)
Individual Characteristics	YES	YES	YES	YES
Year Dummy	YES	YES	YES	YES
Quarter of birth dummies	YES	YES	YES	YES
Observations	529,445	529,445	529,445	529,445
Adjusted R-squared	0.018	0.025	0.018	0.025

Notes: OLS Estimates. We estimate specification (4) of Table 3.

Controls include: Immigrant; Elections; Lega; Immigrant*Elections; Immigrant*Lega; Elections*Lega; Class Size; Share Females; Share Immigrants. Individual characteristics: Female; Socio-economic status; Early Enrolment and Post Enrolment. Municipal characteristics include Population, Municipal Area; Altitude; Employment Rate; Avg. Years of Education; Percentage of elderly people.

Standard errors (corrected for heteroskedasticity and allowed for clustering at the municipal level) are reported in parentheses. The symbols ***, **, * indicate that the coefficients are statistically significant at the 1, 5 and 10 percent level, respectively.

and the bullying behaviours. In columns 3 and 4 we include as a regressor a quadratic term of vote share. This reveals a hump-shaped relationship. The effect of Lega Nord on bullying towards immigrant is low at low levels of Lega vote share, increases gradually reaching a maximum in proximity of a vote share of 0.39 (using coefficients of column 3) and then decreases thereafter.

Finally, as an additional robustness check, in Table 10 we carry out a falsification test where we randomly generate a dummy variable for election occurrence at municipal/year level (with mean 0.26, as per our real sample) and interact it with all the relevant variables. As shown in columns (1) and (2) of Table 10, there is no evidence of a relationship between victimisation/bullying and the interaction term of our interest. Along similar lines in columns (3) and (4) we report results obtained from randomly defining the dummy variable Lega Nord (with mean of 0.46 as in our sample) and consider the interaction terms obtained by using this fake variable. Again, we find no effect neither on victimisation nor on bullying.

7. Conclusions

The increase in divisive, anti-immigration, rhetoric has the potential to have a range of negative social consequences. This paper focused on one particular important social outcome, the bullying victimisation of children from immigrant backgrounds in schools.

We do so in the context of Italy and analysing the influence of Lega Nord, a party that has become increasingly anti-immigrant and inflam-

matory in their campaigning and policies. To identify our effect of interest, we have exploited the occurrence of municipal elections that have the characteristics of heating up the political and social climate towards immigrants where Lega Nord is entrenched. Crucially, municipal elections are arguably exogenous to other determinants of bullying behaviour.

Our main result is that during electoral campaigns in places where Lega Nord is active there are large increases in bullying victimisation within schools that is concentrated solely on children from immigrant backgrounds. These effects are absent for municipalities in which Lega Nord has little support, where no elections occurred and for native children.

Further analysis shows that it is first generation immigrant children (born overseas) that experience the largest increases in victimisation by some margin. These increases are apparent across both verbal and physical forms of bullying. We show that our findings are robust to different definitions of bullying outcomes or different definitions of Lega Nord presence.

More generally, these results suggest that anti-immigration campaigning serves to undercut one of the main aims of public school provision, promotion of social integration across different groups.

These increases in victimisation are likely to have a range of social and economic consequences. Previous research suggests marked and long-lasting negative effects of bullying victimisation. We provide some suggestive evidence that our measures of bullying victimisation are associated with lower educational achievements. Hence, our main take

away point is that anti-immigration politics is likely to harm immigrant children in ways that hinder their assimilation into the host country, and potentially generate long term economic disadvantages.

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